	Application No.	Applicant(s)
Notice of Allowability	10/615,406	TOLLI ET AL.
	Examiner	Art Unit	
	Brandon J. Miller	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/12/2007*.

2. ☒ The allowed claim(s) is/are *1-18*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DUC M. NGUYEN
SUPERVISORY PRIMARY EXAMINER
TECHNOLOGY CENTER 2600

DETAILED ACTION

Response to Amendment

Allowable Subject Matter

1.   The following is an examiner's statement of reasons for allowance:

Claim 1 recites a method with a structure as defined in the specification (pages 6-17) including defining an amount of available capacity for non-real time use in a time slot; defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by the non-real time use; calculating a sub-block reservation rate for a time slot based on the number of free sub-blocks, the amount of available capacity for the non-real time use in the time slot and the number of sub-blocks in a time slot not reserved by real time use; and averaging a sub-block reservation rate for a time slot to determine a down link sub-block reservation rate. Applicant's independent claim 1 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 3-8 are allowable based on their dependence of independent claim 1.

Claim 2 recites a method with a structure as defined in the specification (pages 6-17) including defining an amount of available capacity for non-real time use in a time slot; defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by the non-

real time use; calculating a sub-block reservation rate for a time slot based on the number of

free sub-blocks, the amount of available capacity for the non-real time use in the time slot and

the number of sub-blocks in a time slot not reserved by real time use; and averaging a sub-block

reservation rate for a time slot to determine a down link sub-block reservation rate. Applicant's

independent claim 2 comprises a particular combination of elements, which is neither taught nor

suggested by the prior art.

Claim 9 recites a network element with a structure as defined in the specification (pages

6-17) including defining an amount of available capacity for non-real time use in a time slot;

defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of

sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a

time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by

the non-real time use; calculating a sub-block reservation rate for a time slot based on the

number of free sub-blocks, the amount of available capacity for the non-real time use in the time

slot and the number of sub-blocks in a time slot not reserved by real time use; and averaging a

sub-block reservation rate for a time slot to determine a down link sub-block reservation rate.

Applicant's independent claim 9 comprises a particular combination of elements, which is

neither taught nor suggested by the prior art.

Claim 10 recites a network element with a structure as defined in the specification (pages

6-17) including defining an amount of available capacity for non-real time use in a time slot;

defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of

sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by the non-real time use; calculating a sub-block reservation rate for a time slot based on the number of free sub-blocks, the amount of available capacity for the non-real time use in the time slot and the number of sub-blocks in a time slot not reserved by real time use; and averaging a sub-block reservation rate for a time slot to determine a down link sub-block reservation rate. Applicant's independent claim 10 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 11-16 are allowable based on their dependence of independent claim 1.

Claim 17 recites a network element with a structure as defined in the specification (pages 6-17) including defining an amount of available capacity for non-real time use in a time slot; defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by the non-real time use; calculating a sub-block reservation rate for a time slot based on the number of free sub-blocks, the amount of available capacity for the non-real time use in the time slot and the number of sub-blocks in a time slot not reserved by real time use; and averaging a sub-block reservation rate for a time slot to determine a down link sub-block reservation rate. Applicant's independent claim 1 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claim 18 recites a network element with a structure as defined in the specification (pages 6-17) including defining an amount of available capacity for non-real time use in a time slot; defining a number of sub-blocks reserved by a real-time use in a time slot; defining a number of sub-blocks reserved by non-real time use in a time slot; defining a number of free sub-blocks in a time slot based on the sub-blocks reserved by the real-time use and the sub-blocks reserved by the non-real time use; calculating a sub-block reservation rate for a time slot based on the number of free sub-blocks, the amount of available capacity for the non-real time use in the time slot and the number of sub-blocks in a time slot not reserved by real time use; and averaging a sub-block reservation rate for a time slot to determine a down link sub-block reservation rate. Applicant's independent claim 1 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Conclusion

2.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang et al. U.S Patent No. 6,813,252 B2 discloses a method and system for interleaving of full rate channels suitable for half duplex operation and statistical multiplexing.

Has et al. U.S. Patent No. 7,248,571 B1 discloses a multi-user time slots for TDMA

Hamalainen et al. U.S. Patent No. 6,788,943 B1 discloses channel allocation in the base stations of a cellular radio system.

Macridis et al. U.S. Patent No. 7,133,418 B1 discloses a method and apparatus for allocating time slots within a frame of a TDMA frequency channel.
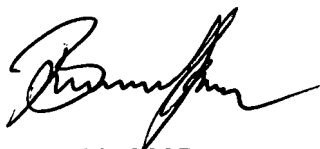
Manian et al. U.S. Patent No. 7,114,000 B1 discloses scheduling network traffic using multiple logical schedule tables.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 23, 2007

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